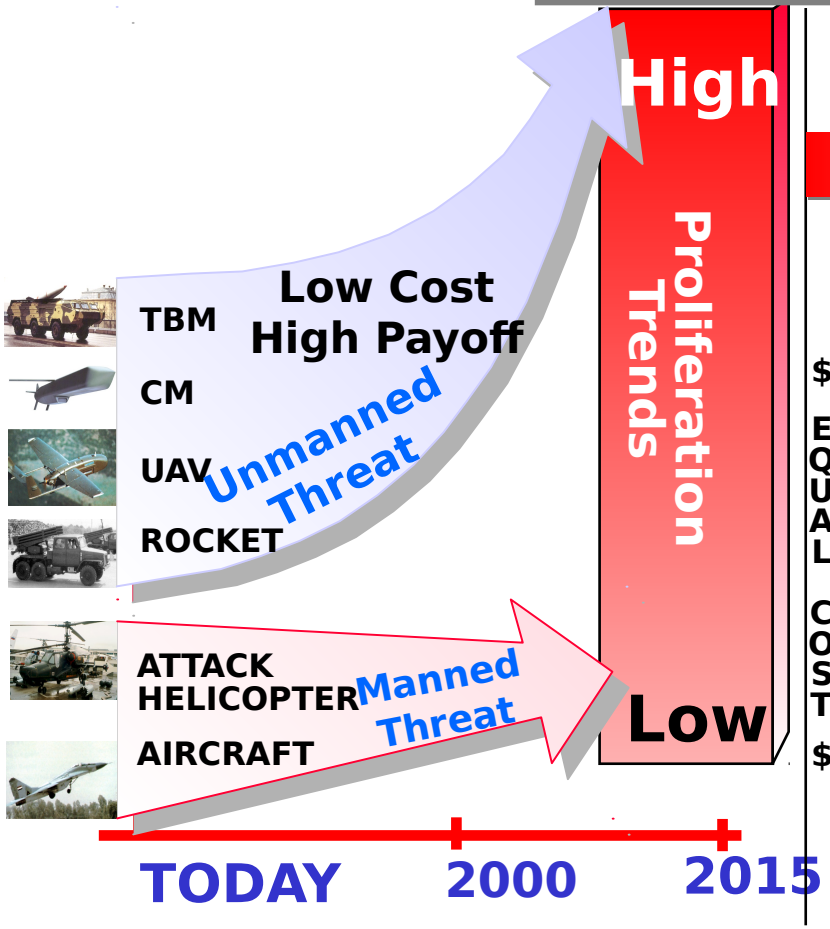
Air and Missile Threat Response to US Target Profiles

Threat Air and Missile Targeting Profile

AIR AND MISSILE THREAT (U)

FIRST TO FIRE

WHY IT'S CHANGING



Applying Lessons Learned… Adoptive and Adaptive

Emerging Capabilities | ***Emerging Strategies***

GIVEN $70M, ANY ADVERSARY COULD BUY…

INCREASING RISK TO US FORCES

EVOLUTION CHARACTERIZED BY PROLIFERATION OF LOW COST, UNMANNED WEAPONS

FIRST TO FIRE

TBM Trends

- Improved Accuracy/ Range
- Increased Use Of Solid Propellant
- Varied Warhead Options
- Shorter Firing Sequence
- Reduced Radar Cross Section

Strategies

Long Range Targeting
Deny Theater Basing
Mobile - Hard to find
Reduce Requirement for Air Force

TBMs ARE BECOMING THE POOR MAN'S STRATEGIC AIR FORCE

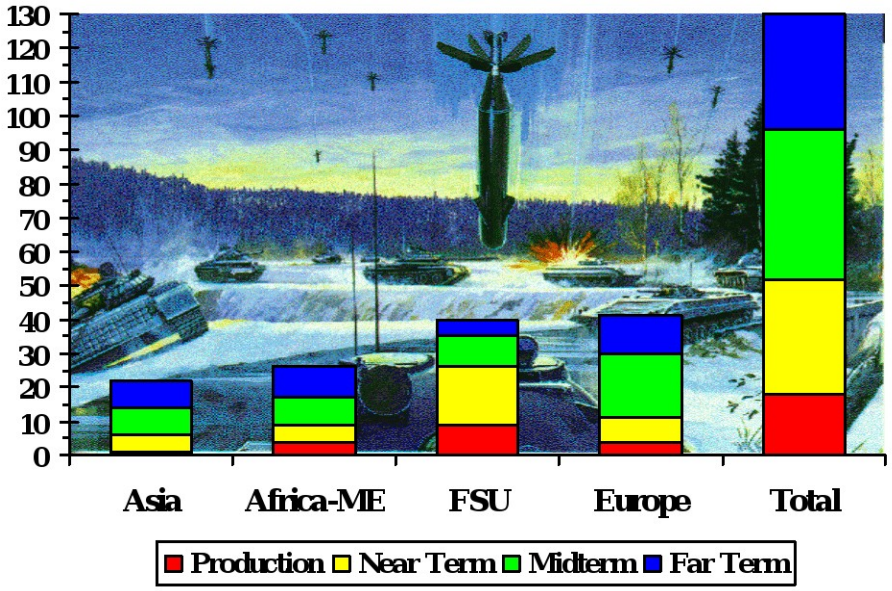
FIRST TO FIRE

MRL PROLIFERATION

The Poor Man's TBM

MRLs Provide Capability To Deliver Long Range Precision Munitions without TBMs

- LASER GUIDED PROJECTILES PROLIFERATING RAPIDLY
- FOUR NEW SENSOR FUZED MUNITIONS IN PRODUCTION
- COURSE CORRECTED MUNITIONS COMMON
- TERMINALLY HOMING MUNITIONS BEING TESTED



Strategies

Mobility
Massed Effects
Lethality..CML Capability
Sanctuary Operation

FIRST TO FIRE

UAV Trends

Attack UAV

- **TARGETS**
  - AIR DEFENSE RADARS
  - ARMOR
  - C2
- **PASSIVE SENSORS**
  - IR
  - RF SEEKERS
  - ACOUSTIC
- **SMALL WARHEADS**
  - HE - POSSIBLE CHEMICAL
  - FRAG - POSSIBLE BIOLOGICAL

- *40 + countries developing/using UAVs*
- *Difficult to detect, track, and destroy*
- *UAVs are proven force multipliers*

Strategies

Reduce Air Force Requirement
Near Real Time Intelligence
Degrade Digitized Battlefield
Preserve Force

Reconnaissance UAV

Electronic Warfare UAV

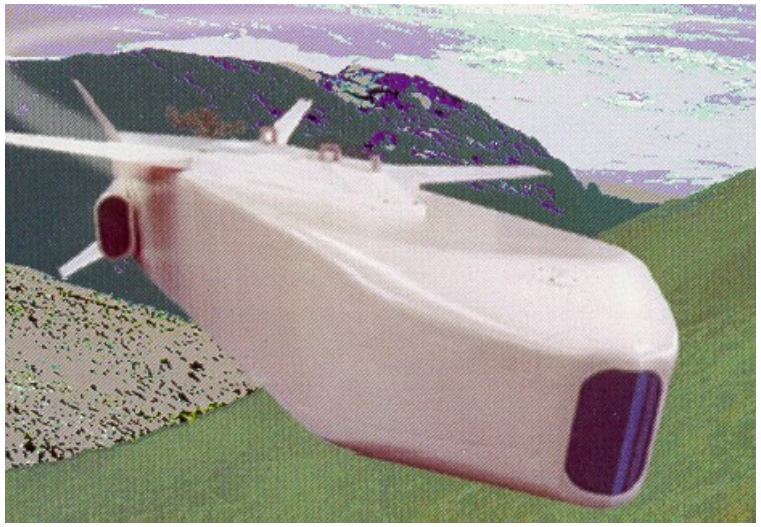
Dispensing Jammer/EMP Burst

Dedicated Comms Jammer

FIRST TO FIRE

Land Attack Cruise Missile Trends

- SMALLER SIZE
- INCREASED RANGE
- LOWER ALTITUDE FLIGHT
- IMPROVED ACCURACY
- FUTURE USE OF SMART SUBMUNITIONS
- POSSIBLE INCORPORATION OF COUNTERMEASURES



- Serious theater-level threat possible before 2005
  - At least 11 countries now developing LACMs
  - Majority of systems are subsonic
  - Simple LACMs could emerge quickly (Maybe Not)
  - Antiship cruise missile (ASCM) and UAV conversion

Strategies

Long Range Attack
Deny Theater Basing
Reduce Air Force Requirement
Precision Attack
Low Cost

ACMS CAN STRIKE TARGETS ACROSS THE THEATER OF OPERATIONS

FIRST TO FIRE

Aircraft Trends

- ***Increased Use Of PGMs/Cruise Missiles***
- ***Increased Stand-off Range***
- ***Reduced Radar Cross Section***
- ***Increased Aircraft Survivability***
- ***Increased Multi-role Variants***

Strategies

Regional Dominance
Potential Air Threat
Survivability vs Attack

AIRCRAFT CAN STILL REPRESENT A LETHAL THREAT..

FIRST TO FIRE

Helicopter Trends

- *Increased Stand-off Range*
- *Improved Accuracy*
- *Better Night & Adverse Weather Capability*
- *Improved Aircraft Survivability Systems*
- *Improved IR Signature Reduction Technology*

Strategies

Regional Overmatch
Reconnaissance
Limited Attack w/ Conditions

Attack Helicopters Are A Dangerous Threat To The Maneuver Force

QUESTIONS?